PROGRAM ELEMENT EVALUATION REPORT

STATE: Maine

DATES OF EVALUATION: July 19 - 22, 2010

PROGRAM ELEMENT EVALUATED: Control of Harvest - (Patrol)

A. Status of Previous Program Evaluation

The FY 2009 evaluation of the Patrol Program administered by the Maine Department of Marine Resources (MDMR) - Bureau of Marine Patrol (BMP) was found to be in compliance with all National Shellfish Sanitation Program (NSSP) Model Ordinance (MO) program requirements. No specific recommendations were provided as a result of the FY 2009 evaluation.

B. Status of Current Evaluation

1. Description of Responsibilities

The Maine Department of Marine Resources - Bureau of Marine Patrol is responsible for the patrol activities associated with the molluscan shellfish program in Maine. The BMP does not delegate patrol responsibilities to any other department or agency in the state. Several individual towns in Maine do have local ordinances which allow them to administer their own resource management program of the shellstock within their town limits. Most of the towns with such ordinances have a warden whose primary responsibility is to monitor any resource closure imposed by the town. The added efforts by the local wardens compliment the BMP by reducing the risk classification in these areas by adjusting for the additional officer presence. The local wardens' patrol activities do not replace the minimum patrol effort required by the BMP. The BMP is currently experiencing a 10% vacancy rate among its field officers.

The BMP has two District offices (Boothbay Harbor and Lamoine State Park). Each office is responsible for three individual Patrol Sections. Each of the sections is responsible for patrolling closed areas within multiple Shellfish Management Areas. During this evaluation the Risk Categories for determining frequency of patrol, the Patrol Policy Document, annual patrol records, and patrol equipment and resources were reviewed and evaluated.

Each marine patrol officer (MPO) is assigned their own patrol vehicle (typically a 4x4 truck) and a wide selection of patrol boats to choose from which are assigned to each of the six patrol sections. Closed area patrols conducted throughout the state are routinely performed by both truck and boat. The BMP does have a fixed-wing seaplane which is used to supplement patrol efforts and provide additional broad coverage of the closed areas.

2. Total Number of Patrol/Harvest Areas Evaluated

The number of patrol areas evaluated is based upon a representative sampling plan designed to provide a 95 percent probability of detecting a 20 percent or greater defect level per the FDA FY 2010 Compliance Program criterion. The State of Maine currently has 25 patrol areas which contain approximately 100 separate closed areas (based on legal notices) throughout their coastal zone, most of which must be actively patrolled to deter illegal harvesting. Based on the number of patrol areas statewide a minimum of 11 closed areas are required to be audited, however 19 closed areas were actually covered because time permitted. A records review of all 25 patrol areas was conducted as part of this evaluation to include a field visit of four different patrol areas within three of the six patrol sections. The field visit involved a ride-along with three different officers in order to assess their effectiveness with regards to the deterring of illegal shellfish harvesting.

The following map (Figure 1) of the coastal area shows which patrol areas were visited during this evaluation.

8/1/10

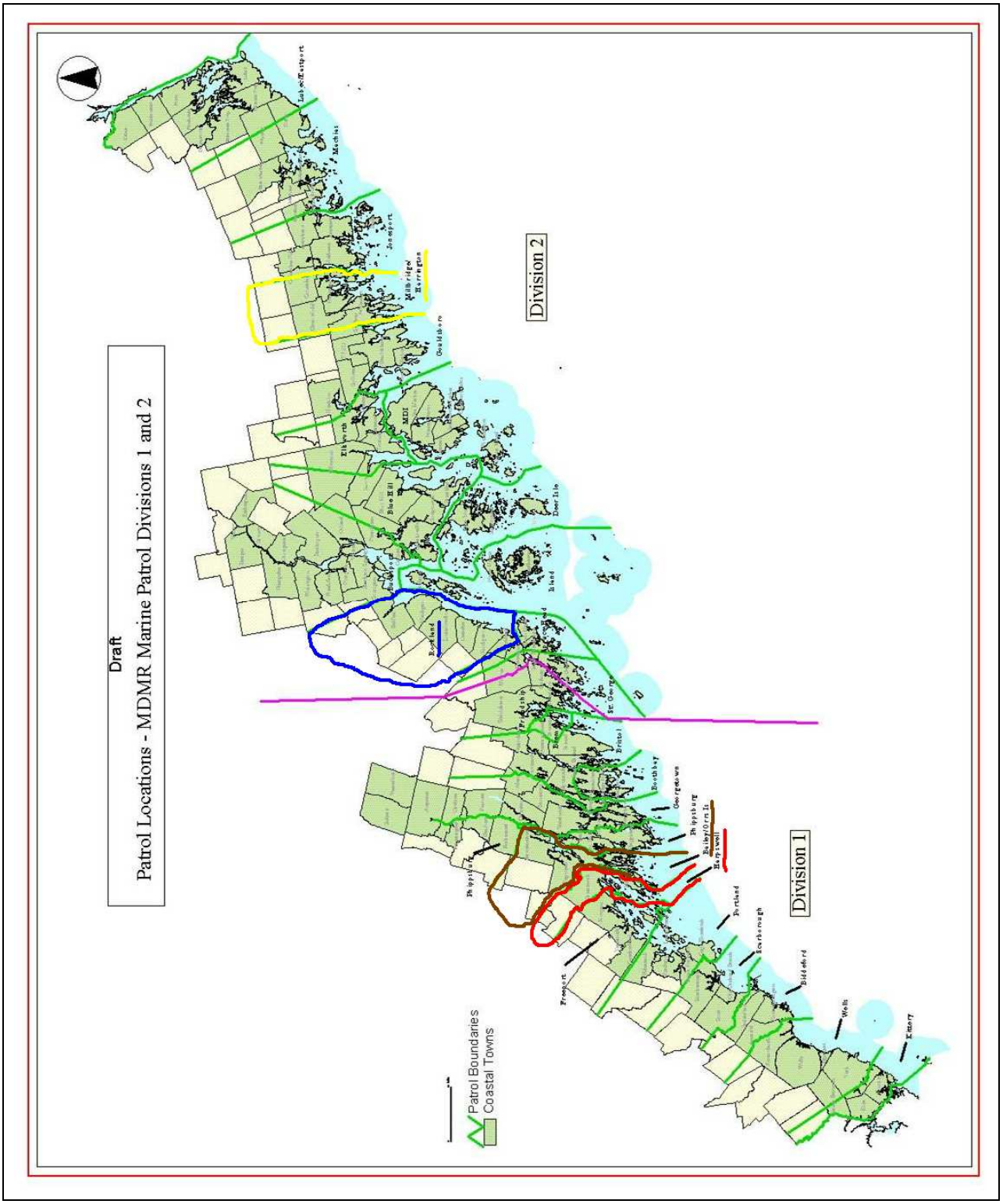


Figure 1

Table 1: Patrol areas evaluated

Patrol Area Evaluated	Classification(s)*	Risk Category	Review Status
1) Kittery	A, CA, R, P	Medium	File review
2) Wells	A, CA, P	Medium	File review
3) Biddeford	A, CA, R, P	Medium	File review
4) Scarborough	A, CA, P	Medium	File review
5) Portland	A, CA, R, P	Medium	File review
6) Freeport/Harpswell	A, CA, R, P	Medium	**Field visit**
7) Harpswell/Bailey & Orrs Is.	A, CA, P	Medium	**Field visit**
8) Phippsburg	A, CA, P	Medium	File review
9) Georgetown	A, CA, P	Medium	File review
10) Boothbay	A, R, P	Medium	File review
11) Bristol/Bremen	A, CR, P	Medium	File review
12) Friendship	A, CA, CR, P	Medium	File review
13) St. George	A, P	Medium	File review
14) Spruce Head	A, R, P	High	File review
15) North Haven/Islesboro	A, R, P	Medium	File review
16) Vinalhaven	A, P	Medium	File review
17) Rockland	A, P	Medium	**Field visit**
18) Bucksport/Blue Hill	A, CA, R, P	Medium	File review
19) Deer Isle/Blue Hill	A, CA, R, P	Medium	File review
20) Blue Hill/Ellsworth	A, CA, R, P	Medium	File review
21) Mount Desert Island	A, P	Low	File review
22) Gouldsboro	A, CA, R, P	Medium	File review
23) Millbridge	A, CA, P	Medium	**Field visit**
24) Jonesboro	A, CA, P	Medium	File review
25) Machias/Lubec-Eastport	A, CA, R, CR, P	High	File review

*__A__-Approved, __CA__-Conditionally Approved, __R__-Restricted, __CR__-Conditionally Restricted, __P__-Prohibited

3. Program Areas in Compliance

   a. Field Observations

   As part of the evaluation, field operations were conducted with three different marine patrol officers. The purpose of the field work was to determine if the three fundamental principals that are taught at the annual in-service training are being practiced in the field. During the training, the patrol officers are asked to review shellfish tagging and labeling, observe cooler temperatures and to recognize examples of gross contamination while they conduct routine work both in certified shellfish plants and while they conduct shellfish harvesting boat inspections. Marine patrol officers received questionnaires several years ago in which they were asked to provide information regarding the amount of shellstock present in a closed area, the ease of harvest and the difficulty of patrolling the closed area. The information was

used to generate a number based on the information which would rank, or provide the level of risk, for each closed area and determine the number of times the closed area should be patrolled at a minimum. The field work during this evaluation was used to verify the risk category questionnaire information with the MPOs. A summary of each day's activities is listed below:

- **MPO Royce Eaton (Patrol Section VI)** and I met at 0930 hours on July 19, 2010 in the Town of Milbridge. MPO Eaton is responsible for patrolling closed areas in and around the Towns of Steuben, Cherryfield, Milbridge and Harrington. On July 19, 2010, we patrolled restricted and prohibited (closed) portions within three separate patrol areas which are available to the public through the MDMR website under the following legal notices:
  Pollution Area No. 52E,
  Pollution Area No. 52G and
  Pollution Area No. 53

  Low tide in this area this day was at 1130 hours. We used a GMC Sierra 1500 four wheel drive pickup truck to conduct vehicle patrol within those towns. We began our patrol by proceeding westbound on Route 1 toward Steuben. MPO Eaton explained that Route 1 which runs east to west is generally the northern border of his shellfish patrol areas and he uses Route 1 to accesses the peninsulas which branch off toward the south. Once in Steuben, we parked at the Steuben town boat ramp. From there we viewed several harvest boats in the approved areas of Steuben Harbor. Our observations were made to help ascertain the number of harvesters which may be on the clam flats this day in preparation to inspect them later at the landing site.

Patrol vehicle (7/19/10)

MPO Royce Eaton patrolling Joy Bay and Pollution Area No. 52-G (7/19/10)

We then proceeded to the Dyer Neck peninsula. Once there, we drove south on Rogers Point Rd toward a point known as Lobster Island. While driving on Rogers Point Rd we viewed the closed area within Joy Cove adjacent to Tucker Creek which is a portion of Pollution Area No. 52-G. We then continued south on Rogers Point Rd and turned onto Wharf Road until we reached Rogers point. From there we

viewed the closed areas known as Steuben Harbor and Parritt Cove which are also portions of Pollution Area No. 52-G.

We then backtracked to Route 1 and traveled east until we exited onto Dyers Bay Rd. MPO Eaton and I proceeded south on Dyers Bay Rd to reenter the Dyer Neck peninsula and while driving we viewed the restricted area at the head of Dyer Harbor within Pollution Area No. 52E. We continued southbound on the Dyer Neck peninsula, turned onto Stanley Point Rd and parked at Yeaton Cove. From there we looked across Dyer Bay and viewed the closed area along the shoreline adjacent to the Petit Manan National Wildlife Refuge located on the Petit Manan Point peninsula. This particular closure is also included within Pollution Area No. 52E.

We then drove north to exit the peninsula and then drove east to the Pigeon Hill peninsula. Once on the peninsula we parked at a point along Pigeon Hill Rd and viewed Pigeon Hill Bay, an open area which borders the Towns of Steuben and Milbridge. We then exited the peninsula and drove east to Milbridge.

Once in Milbridge we drove south to the end of the Kelco Road peninsula and viewed the closure area adjacent to Turner Point, a portion of Pollution Area No. 53. We then drove to Jordon Pier and viewed at the mouth of the Narraguagus River, another portion of Pollution Area No. 53. We then drove north onto Kansas Rd to access viewing points of the Narraguagus River north of Route 1A and south of Route 1, another portion of Pollution Area No. 53. Starting at Route 1A, our patrol route took us northbound on Kansas Rd and Park Street which allowed us to view the Narraguagus River from the east bank. Once we reached Route 1 we crossed the river and drove southbound on Milbridge Rd and North Main St until we returned Route 1A. At various points along the southbound route we were able to view the closure area of the Narraguagus River from the west bank.

We then took Route 1A eastbound toward the Town of Harrington in order to patrol the restricted and closed areas in that town. Once in Harrington we exited Route 1A and drove south on Oak Point Rd on the Pineo Point peninsula. We parked at the end of Oak Point Rd and looked across Flat Bay to view the restricted area between Keylog Shore Point and Curtis Creek on the shoreline of the Ripley peninsular located just to the east of ours. This restricted area is within Pollution Area No. 53.

We then drove northbound to exit the Pineo Point peninsula and took Route 1A eastbound in the Town of Harrington toward the Ripley peninsula. From Route 1A we drove southbound onto the Ripley peninsula eventually reaching Fryeville Point Rd. From the end of Fryeville Point Road located at the mouth of Mill Creek we viewed the closure areas, which include Lily Cove and the mouth of the Harrington River. These closure areas are within Pollution Area No. 53.

We then continued southbound on the Riley peninsula and drove to the Harrington Town Boat Landing located on Ripley Neck to inspect some of the harvest vessels we noted working in the open areas that day. As each vessel pulled into the dock, MPO Eaton inspected vessels for gross contamination and sanitary conditions. He also

inspected harvester licenses, and for the presence of human waste container on board and proper tagging practices. We noted that each harvester rinsed their shellstock contained in sleds, the containers they slide along the mudflats and place their catch in during the course of harvesting activities, in approved waters adjacent to the dock. MPO Eaton stated that he has noted on occasion while on patrol that some harvesters have rinsed their shellstock in unapproved waters. When he comes across those situations, he confiscates the adulterated shellstock and dumps it in a discrete location.

MPO Royce Eaton inspecting a harvest boat at the Harrington Town Boat Landing (7/19/10)

During patrol on July 19, 2010, we noted no illegal harvesting activities or deficiencies regarding the harvest vessels. Our patrol concluded at 1500 hours when MPO Eaton and I returned to our meeting point in Milbridge.

- **MPO Matthew A. Talbot (Patrol Section IV)** and I met at the marine patrol field office located at the Maine State Ferry Terminal in Rockland at 1100 hours on July 21, 2010. MPO Talbot is responsible for patrolling closed areas in the Towns of Rockland, Rockport, Camden, Lincolnville, Northport, Belfast, Stockton Springs and the Penobscot River. On July 21, 2010, we patrolled restricted and prohibited (closed) portions within eight separate patrol areas which are available to the public through the MDMR website under the following legal notices:

  Pollution Area No. 29,
  Pollution Area No. 30,
  Pollution Area No. 31A,
  Pollution Area No. 31B,
  Pollution Area No. 32,
  Pollution Area No. 33,
  Pollution Area No. 34 and
  Pollution Area No. 35

Low tide in this area this day was at 1400 hours. We used a GMC Sierra 1500 four wheel drive pickup truck to conduct vehicle patrol within those towns. We began our patrol by proceeding westbound on Route 1 toward the western end of Rockland Harbor. Rockland Harbor is closed for shellfishing and is in Pollution Area No. 29. From the Public Boat Launch we viewed the western section of Rockland Harbor. We then drove eastbound on Route 1 and at various points along the route we viewed the midsections of Rockport Harbor. We continued westbound on Route 1 until we reached Jameson Point. From there we viewed the eastern section of Rockland Harbor.

We then continued eastbound toward Rockport. Once in Rockport we turned onto Warrington Street. From Warrington Street we viewed Clam Cove, the western section of the close area included within Pollution Area No. 30. MPO Talbot stated that Clam Cove is most likely the only muddy section suitable for sustaining softshell clam resources within Pollution Area No. 30. The other sections within this particular closure area are rocky in nature with some mussel populations. We then drove eastbound on Route 1 until we reached Rockport Harbor, the eastern section of Pollution Area No. 30. Once there, we viewed Rockport Harbor from the parking lot of the Rockport Marina.

MPO Talbot stated that most illegal shellfishing violations within his patrol areas are related to recreational harvesting. However, he has issued some commercial tickets in the Town of Stockton, an area where he steps up his vigilance.

We then continued eastbound toward Camden. The entire shoreline of the Town of Camden from Deadman Point to Lincolnville is closed to shellfishing. This particular closure zone is within Pollution Area No. 31A. Once in Camden we viewed Camden Harbor and the mouth of Sherman Cove from Eaton Point. Before leaving Camden, we continued eastbound and turned onto Marine Ave. At the end of Marine Ave we viewed the back section of Sherman Cove.

MPO Matt Talbot patrolling Wales Beach in Ducktrap Harbor (7/21/10)

We proceeded eastbound on Route 1 toward Lincolnville. Once there we viewed Lincolnville Beach from the Lincolnville Boat Launch. This particular closure zone is also within Pollution Area No. 31A. We continued eastbound on Route 1 until we reached the eastern end of Pollution Area No. 31A, which includes the western section of Ducktrap Harbor. Once there we viewed the section of Ducktrap Harbor adjacent to Wales Beach from the backyard of a private residence located at the end of Howe Rd.

We then drove eastbound on Route 1 toward Northport. The Northport closure area within Pollution Area No. 31B spans from Great Spruce Head at the western most end to Kelly's Cove at the eastern most end. Once in Northport we exited Route 1 and drove to the Northport Boat Launch. From there we viewed Saturday Cove a portion of Pollution Area No. 31B. We then drove eastbound on Shore Road. When we reached the eastern most end of Pollution Area No. 31B, we parked on the side of Shore Road and viewed Kelly's Cove.

We then continued eastbound on Shore Road and entered Bayside, a small community adjacent to Kelly's Cove. Kelly's Cove is at the western most point of Pollution Area No. 32 which spans from there to Moose Point at the eastern most end of that particular close zone. Pollution Area No. 32 also includes all of Belfast Bay which is located between those two points. We passed through Bayside and then turned onto Route 1 eastbound toward Belfast. Once in Belfast we turn onto Route 3 and continued eastbound. We exited Route 3 in Belfast onto Footbridge Road. At the end of Footbridge Road we viewed the mouth of Belfast Bay. We then drove north through Belfast and then through the small community of Bryants Corner. We continued driving north and turned onto Kaller Road which runs along the east bank of the upper region of Belfast bay north of Route 1. From Kaller Road we viewed the upper region of Belfast Bay which is also a portion of Pollution Area No. 32. We then turned south and drove to Route 3 in Belfast. We turned onto Route 3 and drove eastbound toward Searsport.

Once in Searsport we turned onto Steamboat Road and at the end of that road near the Searsport Boat Launch we viewed the closure area included in Pollution Area No. 33. We then continued eastbound on Route 3 and turned off onto Sears Island Road and drove onto the Sears Island Causeway. We parked alongside the Sears Island Causeway and looked west to view the restricted area adjacent to the causeway and the closed area near Kidder Point within Long Cove. This closure area and restricted area are each included in Pollution Area No. 33. From the same causeway we looked east and viewed a portion of the closed area in Stockton Springs included in Pollution Area No. 34. We then drove back to Route 3 and drove eastbound to Stockton Springs.

Once in Stockton Springs we exited Route 3 and drove south to Cape Jellison. Once on the cape we took Cape Jellison Road and parked adjacent to a sailboat mooring field. From there we viewed the closure area of Stockton Harbor included in

Pollution Area No. 34. We then continued on Cape Jellison Road which looped around to the other side the cape. We then took a side road to access the eastern shoreline of Cape Jellison where we parked and viewed the mouth of the Penobscot River, a potion of Pollution Area No. 35. The Penobscot River borders patrol sections IV and V.

We then drove to Grant's Seafood (ME-177-SP), a shucker packer operating in Stockton Springs. When we arrived, the firm had already ceased operations for the day thus no inspection was conducted.

We then drove west to Belfast. Once there we conducted a plant walkthrough of Maine Martime Products (ME-216-SP). MPO Talbot inspected the sanitary conditions of the plant and the temperature which shellfish were held. He also inspected shellstock tags as well as the packaging and labeling of shucked softshell clams held in the walk-in cooler. The firm was not shucking at the time of our visit and no problems were found at the plant.

Our day passed without incident and we concluded the patrol at 1700 hours when we returned to our meeting place at the State Ferry Terminal in Rockland Harbor. No shellfish violations were noted by MPO Talbot.

- **MPO Robert Beal (Patrol Section II)** and I met at the Hampton Inn parking lot located in Bath at 1300 hours on July 22, 2010. MPO Beal is responsible for patrolling closed areas in the Towns of Freeport and Harpswell. On July 22, 2010 day we patrolled the aforementioned towns as well as Orrs Island and Bailey's Island, areas normally patrolled by MPO Scott Coutre who was off duty this day. Due to a rainfall event of >3 inches which occurred the previous night all waters normally open in the towns visited this day were under an emergency rainfall closure. During the course of patrol activities on July 22, 2010, MPO Beal pointed out the boundary lines for the areas classified as restricted, conditional and prohibited (closed) within eight separate patrol areas which are available to the public through the MDMR website under the following legal notices:

  Pollution Area No. 15,
  Pollution Area No. 16,
  Pollution Area No. 17A,
  Pollution Area No. 17B,
  Pollution Area No. 17C,
  Pollution Area No. 18,
  Pollution Area No. 19A and
  Pollution Area No. 19B

  Low tide in this area this day was at 1500 hours. We used a GMC Sierra 1500 four wheel drive pickup truck to conduct vehicle patrol within those towns. We began our patrol by proceeding westbound on Route 1 toward the New Meadows River. As we crossed the Upper New Meadows River MPO Beal pointed out New Meadows Lake which spans north from Route 1. The northern section of the lake is classified

prohibited and is a portion of Pollution Area No. 19A. MPO Beal stated that multiple arrests have been made in this prohibited zone within the last two months.

MPO Beal and I continued driving westbound on Route 1 for a short distance and then made our way south toward the Thomas Point Recreation Area located on Thomas Bay, an area normally open. From Thomas Point Beach we viewed the bay to determine if anyone was harvesting shellfish during the emergency closure. No shellfish harvesting activities were noted. However, some worm diggers were observed working on the mud flats. Throughout Maine people make a living digging for blood worms used for fishing bait. Digging for worms is permitted in the closed areas and MPOs must determine what particular operations are taking place during their patrol activities.

We then exited the recreational area and made our way further south taking Gurnet Road (Route 24) toward Woodward Cove, a zone classified restricted for relay while in the open status. We parked on Gurnet Road and viewed the restricted area of Woodward Cove form the backyard of a private residence. This particular area is also included in Pollution Area No. 19A. No shellfish harvest activities were noted here so we moved on.

We continued southbound on Gurnet Road and passed onto Sebasodegan Great Island. Once on the island we exited onto Cundy's Harbor Road and traveled south in the direction of Cundy's Harbor. We parked on Cundy's Harbor Road and viewed the waters of Middle New Meadows River. We also observed the waters between Harpswell and Long Island, including the zones classified as prohibited and restricted within Pollution Area No. 19B.

MPO Robert Beal inspecting patrol section 2 (7/22/10)

We then made our way to the western shoreline of the Cudy's branch on Sebasodegan Great Island and from Vinal Road we viewed Quahog Bay including the prohibited

areas within Pollution Area No. 18. We then drove north to Route 24 and turned south on Route 24 toward Orrs Island and Bailey Island. We then turned onto a side road and drove to and patrolled Card Cove. Card Cove is included within Pollution Area No. 17C.

We then drove west across Sebascodegan Island toward Lumbos Hole. As we passed Lumbos Hole, MPO Beal pointed out the section of Lumbos Hole which is classified prohibited, included within Pollution Area No. 17C. He also explained that this particular body of water appears to be a hot spot where Alexanrium fundyenses blooms spread from and into surrounding areas during red tide seasons.

We then drove west on Mountain Road and while driving ECO Beal pointed out two areas classified prohibited within Pollution Area No. 17A, particularly Strawberry Creek and Ewing Narrows.

MPO Robert Beal pointing out closure areas within patrol section 2 (7/22/10)

We continued westbound on Mountain Road until we reached Route 123 on Harpswell Neck. We then turn south on Route 123 and then turned onto Point Lookout Road until we reached the shoreline at the west side of Harpswell Neck adjacent to Middle Bay. From the end of Point Lookout Road we viewed the bay which was normally open, but was subject to the emergency rainfall closure this day. From there we also looked west toward the seasonally closed zone surrounding Paul's Marina in Merepoint Bay included within Pollution Area No. 16.

We then drove across Harpswell Neck toward the eastern shore. We took Merriman Cove Road to Lawrence Lane. We parked at the end of Lawrence and walked to the shoreline and viewed Widgeon Cove and Harpswell Sound, both normally open but were now subject to the emergency rainfall closure. From that same point, ECO Beal pointed out the eastern shoreline of Bailey Island and Orrs Island across Harpswell

Sound. These particular stretches of shoreline are classified prohibited and are included in Pollution Area No. 17C.

We then drove south to Allen Point Road and parked at the end of that road adjacent to Clark Cove, an area classified prohibited within Pollution Area No. 17B. From there we looked south along the shoreline and viewed another portion of Pollution Area No. 17B, particularly Harpswell Harbor, an area classified restricted.

We then drove west across Harpswell Neck toward the western shoreline until we reached the discontinued US Navy fuel depot pier. From there we viewed the zones along the shoreline stretching to the north and south classified prohibited, included in Pollution Area No. 17B. We then exited the old US Navy property and turned onto Harpswell Neck Road.

We then drove south on Harpswell Neck Road to reach the southern point of Harpswell Neck. From there we viewed the prohibited areas adjacent to Potts Point. We also looked across Potts Harbor to view the restricted area in Ash Point Cove. These prohibited and restricted zones are included within Pollution Area No. 17B.

We then drove north, turned onto Basin Point Road which runs along the shoreline of Basin Cove, an area which is seasonally closed during the warmer months. Basin Cove is included in Pollution Area No. 17B. We then took Route 123 north and exited Harpswell Neck.

Once off Harpswell Neck, we turned onto Route 1 and drove west to Freeport. We then drove to Sandy Beach in Freeport and viewed the zones of the Harraseeket River classified prohibited and restricted, included within Pollution Area No. 15. ECO Beal explained that under normal conditions there is an operation on the river whereby softshell clams taken from the restricted areas are relayed for depuration. We patrolled these areas of the river to make sure nobody was taking clams during this emergency rainfall closure. We then drove to the South Freeport Town Dock and viewed another portion of the restricted zone on the Harraseeket River included within Pollution Area No. 15.

MPO Beal and I concluded our patrol at 1800 hours when we returned to our meeting place in Bath. No harvesters were observed working and no problems were noted this day.

b. Program Review - Records and Patrol Policy Document

On Tuesday, July 20, 2010 the BMP patrol logs were reviewed at the main office in Hallowell, Maine. The patrol logs reviewed covered the period from July 1, 2009 to June 30, 2010. Each section has multiple patrol areas which cover many individual closed areas. Table 2 reflects the number of minimum patrols based on the risk assessment which were not met for the individual patrol area within the specified Section.

Table 2: Patrol Effort Broken Down by Section for the FY 2010 Evaluation
(Numbers Represent **Missed** Patrols within the Entire Section)

Month	Patrol Section						
	1	2	3	4	5	6	Totals:
-2009-							
July	-	-	-	-	-	-	0
August	-	2	-	-	-	-	2
September	-	-	-	-	-	-	0
October	-	-	-	-	-	-	0
November	-	-	-	2	-	-	2
December	-	-	-	-	-	-	0
-2010-							
January	-	-	-	-	-	-	0
February	-	-	-	-	-	-	0
March	-	-	-	1	-	-	1
April	-	-	-	-	-	-	0
May	-	-	-	-	-	-	0
June	-	-	-	-	-	-	0
Totals:	0	2	0	3	0	0	**5**

FDA review of the monthly patrol logs for the period July 1, 2009 through June 30, 2010, found that BMP met the minimum monthly patrol requirements called for in the MO. BMP missed 5 of 2632 required annual patrols during the subject time period reflecting a 0.2% patrol deficit ratio. As per the MO, a patrol program is deemed in compliance when the patrol authority achieves no more than a 5% deficit ratio.

Please note: Although a minimum of 2632 patrols were required, a total of **5345** were completed. Those patrols which were missed and identified in Table 2 were compensated by the high number of patrols completed in adjoining patrol areas and other months.

(1) *Legal penalties* - The BMP has specific laws to use when writing a citation to an individual who has violated shellfish safety requirements. Shellfish license violations start at $280; while first and second offense closed area fines are $300 and $500 respectively. Shellfish tagging violations are $100 per offense. 12-

MRSA Section 6207 does allow for the seizure and forfeiture of any equipment, vehicle, etc. used to violate Marine Resources Laws and/or Regulations.

(2) *Harvester education materials* - The BMP does not provide specific harvester informational handouts. The bureau relies on harvesters obtaining their information directly from the officers, the MDMR internet site http://www.maine.gov/dmr/index.htm and through local shellfish councils located throughout Maine's coastal area. The Public Health Division did complete a harvester education brochure in 2007. The brochure is distributed to all certified dealers each year so they may share with their harvesters. In 2008 the brochures were added to the harvester licensing application package.

(3) *Comprehensive listing of all harvest areas* - The Division of Public Health within MDMR is responsible for water quality classification and completing all of the required sanitary surveys. Each sanitary survey contains a legal description of the shellfish management area (which includes water and land boundaries). The Public Health Division is also responsible for maintaining the list of closed shellfish harvesting areas. The Public Health Division notifies the officers by use of the pager system, by notifying the lieutenant in the local office and by mailing hard-copies of the legal notices to the officers' home addresses through the US Postal Service. The legal description of each closed area can be found at http://www.state.me.us/dmr/rm/public_health/closures/closedarea.htm.

All MPOs have portable laptops tied to a central database which they take with them while conducting patrol activities. Closure notices are e-mailed to all MPOs directly from division headquarters immediately after they are signed into law.

(4) *Patrol Policy Document* - The BMP does have a Patrol Policy Document (PPD) which contains the information outlined in Chapter VIII@.01.B.7. [Critical]

(5) *Patrol Policy Document updated* - The BMP updates the PPD on an on-going basis. During the file review at the main office the FDA's copy of the PPD was updated to match the BMP copy. [Key]

(6) *NSSP patrol training requirements* - The BMP complies with the requirements listed in Chapter VIII@01.B.6. Each MPO receives 18 weeks of training at the Maine Criminal Justice Academy (MCJA). They also attend a 4-week Marine Patrol School. They have the ability to attend in-service schools at the MCJA as well as the Federal Law Enforcement Training Center in Glynco, Georgia. MPO candidates must successfully complete a one year on-the-job probationary training period with a Field Training Officer. The training received by MPOs includes shellfish enforcement issues such as licensing, size and closed area enforcement (both pollution and PSP). Two annual division meetings attended by Lieutenants and field MPOs are held during which any changes to shellfish enforcement policy is discussed. [Key]

(7) *Growing area patrol* - The BMP conducts patrols based on the established risk assessment which details the number of patrols necessary for each closed area. All closed areas have a risk assessment completed or the patrol frequency automatically defaults to a high risk requiring the MPO assigned to that area to patrol the closed area 16 times per month. The latest comprehensive risk rating assessment was conducted in 2009 (see Attachment I). [Critical]

(8) *NSSP patrol frequency* - The BMP has met the minimum patrol frequency in all areas. This assessment was based on the review of patrol logs submitted to the main office in Hallowell. The MPOs have typically patrolled their assigned area at the highest frequency needed for any individual closed area found in their patrol area. [Key]

(9) *Formalized MOA/MOU* - The BMP is the state authority with sole responsibility for enforcing shellfish bed closures for public health reasons. The BMP does not share this responsibility with any other agency and thus does not have any formalized agreements. [Key]

(10) *Risk management plan* - The BMP patrols state closed areas per Chapter VIII@.01.B.4 and does not patrol at a lesser frequency due to exceptions listed under Chapter VIII@.01.B(3)(b)(c)(d); therefore no such plan is needed. [Critical]

c. Patrol Risk Assessment (Determination of Frequency)

The BMP maintains an Excel spreadsheet which contains the required risk assessment information needed to determine the proper patrol frequency for each of the state's closed areas. The risk assessment was created based on the requirements listed in Chapter VIII@.01.B.4. A copy of the most recent version of the spreadsheet can be found in Attachment I.

Several patrol frequency changes were made over the past year. Changes to the patrol frequency are mostly due to changes in water quality classification as a result of work completed by the Public Health Division. Occasionally changes in patrol frequency will result when an area is depleted, community policing efforts have improved or a conditional area is created.

Table 4: Patrol Program Risk Assessment by Individual Closed Area Visited - FY 2010

Area Designation	Productivity	Ease of Harvest	Difficulty of Patrol	Adjustments	Total	Risk Category	Number of Patrols
52-E Dyer Bay, Dyer Hbr., Pinkham Bay, Steuben	3	5	1	-0.65	2.75	Low	4
52-G Joy Bay (Gouldsboro/Steuben)	5	5	3	-0.65	3.95	Medium	8

Area Designation	Productivity	Ease of Harvest	Difficulty of Patrol	Adjustments	Total	Risk Category	Number of Patrols
53 Narraguagus River and vicinity to Harrington River	5	5	3	-0.65	3.95	Medium	8
29 Rockland (Rockland Harbor, Broad & Deep Coves)	3	5	2	-0.40	3.20	Medium	8
30 Rockport Area	3	5	2	-0.40	3.20	Medium	8
31-A Rockport Harbor to Ducktrap Harbor, Lincolnville	3	5	2	-0.40	3.20	Medium	8
31-B Spruce Head to Kelly's Cove, Northport	3	5	2	-0.40	3.20	Medium	8
32 Belfast Bay	3	5	2	-0.40	3.20	Medium	8
33 Searsport	3	5	2	-0.40	3.20	Medium	8
34 Stockton Hbr, Stockton Springs & Searsport	3	5	2	-0.50	3.10	Medium	8
35 Penobscot River (Stockton Sp., Bucksport, Orland)	3	5	4	-0.65	3.35	Medium	8
15 Harraseeket & Litter Rivers (Freeport)	5	5	2	-0.65	3.75	Medium	8
16 Maquoit & Middle Bay (Freeport, Brunswick, Harpswell)	5	5	2	-0.65	3.75	Medium	8
17-A Upper Harpswell Neck and Long Reach	3	5	3	-0.65	3.15	Medium	8
17-B Harpswell Neck, Harpswell	3	5	4	-0.50	3.50	Medium	8
17-C Bailey Is., Orrs Is., & SW Sebascodegan Is.	4	5	3	-0.50	3.70	Medium	8
18 Quahog Bay, Hen Cove, Ridley Cove (Harpswell)	5	5	2	-0.50	3.90	Medium	8
19-A Upper New Meadows River (Bath/Harpswell)	5	5	2	-0.65	3.75	Medium	8
19-B Middle New Meadows River (W Bath / Harpswell / Phippsburg)	3	1	2	-0.50	1.50	Low	4

d. Patrol Document Specifications –

(a) Citation of the law providing the legal basis for enforcement authority;	Yes - State Statues and Departmental Regulations provided.
(b) Citation of the laws & regulations, including penalties, which are directly related to effective	Yes - Title 17-A, Chapter 53. New second offense closed water harvest fine set at $500.00 minimum.

control of illegal harvest activities;	
(c) The organizational structure of the unit responsible for patrol activities, including:	Yes
(i) Patrol unit name, address & phone number;	Yes
(ii) The roster and chain of command;	Yes
(iii) Area assignments that support the frequencies of patrol delineated in B.(2)[of MO]; and	Yes - 25 patrols areas split among 2 Divisions, each Division with 3 sections.
(iv) A listing of specific vessels, vehicles & equipment that support the frequencies of patrol delineated in B.(2).	Yes
(d) Summaries of training in shellfish patrol techniques;	Yes - 18 week State Police Academy, 4 week Marine Patrol School and 1 year with Field Training Officer (FTO).
(e) The methods used to inform officers of growing area classifications and status, and of any special activities licensed in the area;	Yes - Monthly District staff meetings or immediate contact for emergency closures by pager, cell phone, police radio and laptops taken into field.
(f) A listing of growing areas where patrol is required;	Yes - Risk classification database maintained in excel spreadsheet.
(g) An identification of any patrol problems;	The seaplane used for patrol purposes was completely refurbished and will be used more frequently.
(h) The type & frequency of reporting by patrol personnel;	Yes - BMP Chapter 3, Policy 1.J "Growing Area Reporting"
(i) Copy of agreements with other agencies responsible for shellfish patrol activities;	No such agreements have been initiated.
(j) Citations/summonses for the past year. If available, this information may include:	Yes - 39 closed area harvesting citations written from August 2009 to July 2010.
(i) The number of convictions or dismissals;	Yes - 37 convictions, 10 pending, 2 dismissals during review period.
(ii) Fines in dollar amount;	Yes - Fines range from $300 to $1,000.
(iii) Equipment or property confiscations and forfeitures;	N/A - No confiscations or forfeitures indicated during review period
(iv) License suspensions or revocations;	Yes - 6 license suspensions. (For second offense closed area harvesting.)
(v) Jail sentences; and	Yes - No jail time was documented during the review period.
(vi) Written warnings.	Yes - 63 warnings written during review period. Nearly all written to

	recreational harvesters.
Part II: The remaining items in B.3.d. represent ancillary information that although not specifically required, could provide important information for evaluating B.3.d. (a) – (j).	
Resources Used to Meet Required Patrol Frequencies:	
(a) Vessels: Number & type suitable and adequate to support the minimum patrol frequency for each area:	Yes
(i) shallow draft needs	Yes
(ii) open water/adverse weather	Yes
(iii) rocky bottom	Yes
(iv) wetland/marsh area	N/A
(v) ocean	Yes
(vi) barrier island	Yes
(b) Aircraft: Number & type suitable and adequate to support the minimum patrol frequency for each area:	Yes (Used a minimum of six (6) times monthly for shellfish law enforcement, weather permitting.)
(i) wheeled	N/A
(ii) seaplanes	Yes - Cessna 185 amphibious aircraft
(iii) helicopters	No
(iv) access to plane & pilot (i.e. affiliated with another patrol unit or another agency)	Yes - State Police plane and helicopter are available for special operations and emergencies.
(v) need for coordination with vessels for apprehension, especially with wheeled planes	Yes (Coordination with ground units through the use of GPS, Computer laptops used in the field & VHF radios.)
I Vehicles: Number & type suitable and adequate to support the minimum patrol frequency for each area:	Yes (Assigned to each MPO.)
(i) vessel towing capabilities	Yes (Also, heavy tow trucks available when needed.)
(ii) number of vehicles (size and type)	Full-size 4x4 Pickup trucks (one per officer)
(iii) number of vehicles out of service	None, but spare State Motor Pool vehicles are available
Other Types of Transportation Used to Conduct Patrols:	
- all terrain vehicle (ATV)	None
- motorcycles	None
- jet skis (Personal water craft)	None

Vision Enhancement Equipment: Number & Type Used to Support the Minimum Patrol Frequency for Each Area:	
- binoculars	One 7x50 for each officer
- spotting scopes	Carried by several officers. Access to others within the section.
- night vision	Carried by several officers. Access to others within the section.
- infrared vision equipment	Several hand held; one thermal imager on 25' vessel
- radar	On all vessels 35' & larger.
- additional support equipment used (i.e. electronic devices that can be used to detect motion and alert the patrol officer of possible illegal activities)	Yes – One GPS for each officer. Each District also has access to a camera, 35 mm or digital. Each Division has access to motion sensor equipment.
Communication Equipment: Number & type Used to Support the Minimum Patrol Frequency for Each Area:	
- access to 24-hour dispatching	Yes – Regionally through State Police
- poor reception areas	Yes
- number of portable radio units	One 100 watt police band in vehicle and one hand-held radio for each officer
- number of cellular phones & area of coverage	All field officers. Statewide coverage with many dead zones north and east. However, with new cellphone towers being installed dead zone has been and will become less problematic.
- Laptops used in the field	3G modems will be issued to field officers boosting laptop communication capabilities.
Classification of Radio Frequencies:	
- public access	Yes
- undercover operations	Use code words or cell phones
- scrambled frequencies	No encrypted radios available.
Special Operations Equipment & Personnel: Number & Type Used to Support the Minimum Patrol Frequency for Each Area:	
(a) How used	Overtime & use of NMFS, US F&WS and local law enforcement. USCG

	vessels when needed. Helps with surveillance of illegal harvesting.
(b) Patrol officers: Number adequate to support the minimum patrol frequency:	Full staff of field officers is 43 (including pilot). Currently there are eight vacancies, leaving 36 field officers to meet the minimum patrol frequency.
(i) Total unit staff roster (Responsible for growing area patrols only)	53 Total: One colonel, one major, two lieutenants, six sergeants, 43 officers. (eight current vacancies)
(ii) Total number of active field officers conducting patrols	37 Officers (Boat Captains, pilot and MPOs)
(iii) Other patrol responsibilities: finfishing, lobstering & crabbing, waterfowl hunting, upland hunting, boating safety, search & rescue, etc.	In addition to all items to the left the MPOs have full police arrest powers statewide.
(iv) Other activities: administrative, court appearances, training courses, etc.	Training includes: 18 week State Police Academy, 4 week Marine Patrol School and 1 year with FTO, several one day refresher courses annually, plus annual specialized training.
Assistance from Other Enforcement Units:	
- Federal, i.e. USCG, NMFS	Also, US F&WS, US Coast Guard, FBI, Customs and Secret Service
- state, i.e. sister agencies or units in same state or agencies in other states	ME Fish and Wildlife, Maine State Police, ME- DEP, NH Fish & Game
- local, i.e. county or town marine police, shellfish wardens, bay constables	Local town wardens with arrest authority and municipal law enforcement officers.
- signed MOUs or interagency agreements:	N/A

e. Requirements for Harvesters

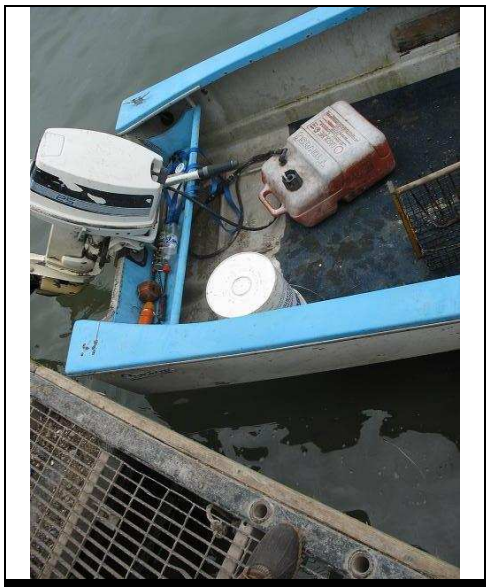
(1) *Harvester Licensing* - Any individual who wishes to harvest shellfish commercially in the state of Maine must apply for a license. Harvesters complete and submit an application to the Licensing Division of the MDMR. Licenses are only valid for one year. The harvesters are required by law to sell commercially only to certified dealers. Licenses may be renewed in person at the Hallowell main office or on-line at http://www.mainemarinelicensing.com. All certified shellfish dealers are required by their HACCP plans to verify that each harvester is in possession of a valid harvesting license. Compliance with this requirement is

the responsibility of both the MPOs while on patrol as well as the certified dealer inspectors whenever they are in the processing plants. When the harvesters are licensed they are directed to the MDMR website which lists all of the closed shellfish beds throughout the state of Maine.

MPO Royce Eaton inspecting a harvester's license (7/19/10)

(2) *Harvest vessels* - The BMP does not have a mechanism to certify or approve harvest vessels. The MPOs however have been trained to look for gross contamination issues along with any other circumstance which may cause shellstock not to be protected. While on patrol the officers described how they look for false bottoms in the boats or some other physical separation between the shellstock and possible adulterants. The MPOs inform harvesters to keep oil, fuel, bilge water, animals and any other non-clean item from shellstock. Some MPOs recommend that harvesters use tarps on an as needed basis.

(3) *Disposal of Human Sewage from Vessels* - The BMP does have a regulation in place which requires harvest vessels to have a human sewage waste container on-board; however, the regulation stipulates that any vessel in operation for less than six hours is exempt from the requirement. Large mussel dragging vessels and offshore clam and scallop dredging vessels all have onboard facilities.
While on patrol no harvesters were observed harvesting directly from a boat. All harvesters were seen either driving a small metal skiff out to distant mud flats or walking onto the intertidal flats from shore. The MPOs mentioned how they recommend buckets to those using a boat. The officers provide verbal education to the harvesters regarding the health concerns of discharging human waste into the shellfish waters. The Public Health Division provided written educational material for review.



Plastic bucket available as a human waste container, if needed (7/19/10)

(4) *Shellstock washing* - While on patrol it was noted that soft-shell clam harvesters were washing the shellstock in the approved area water adjacent to where they were harvesting and at landing site in waters classified approved. The MPOs provided examples of when they have confiscated shellfish because a harvester was observed washing shellstock in closed waters, such as at a public boat landing.

Harvester rinsing shellstock near dockside in an area classified approved (7/19/10)

(5) *Shellstock Identification - Harvester tags* - During one of the three days of field evaluations harvesters were found working the local shellfish beds of multiple towns within patrol section VI. Harvesters were observed through the use of binoculars and some of the harvest boats were inspected at the landing site. No tagging problems were noted during these inspections.

Past observations have shown that the BMP will issue either a warning or a citation for incomplete harvest tags and that the officers usually confiscate any untagged shellfish. Untagged shellfish may be placed on hold while the origin of the shellfish is investigated and verified through other means such as invoices when found at certified dealers. Harvesters were inspected at the certified dealers while they were delivering their clams to market. All shellstock was found to be properly labeled with harvester tags.

(6) *Shellstock Temperature Control* - The MDMR regulations have the following in effect:

> 9.08 Shellstock Temperature Control - Harvested shellstock shall be delivered within 16 hours from the time of harvest (Chapter 9.06(B)(5)) on the shellstock tag to temperature control, i.e. a certified dealer or direct market/consumer within the State of Maine. Time and temperature control requirements must be set in accordance with the Model Ordinance, Chapter VIII Control of Shellfish Harvesting and Chapter 15.02(A)(91). Harvesters will be informed of any change to the 16-hour requirement by notice published in newspapers of general circulation and press release to the print media if the maximum number of hours before delivery for Maine must change.

Harvesters are required to place the time of harvest onto the harvest tags. The MPOs and the certified shellfish dealers are reviewing the harvest tags to ensure the time of harvest is present and that the shellfish arrive at the certified dealer within 16 hours.

4. Current Findings of the Element Evaluation

During the FY 2010 evaluation, patrol logs from July 2009 through June 2010 were audited. The BMP performed far more than the 2,632 separate patrols needed statewide to accomplish the minimum number of required patrols based on patrol risk assessment. Specifically, BMP performed 5345 actual patrols. The BMP has met all of the requirements for a patrol authority listed in Chapter VIII of the NSSP-MO.

No program deficiencies were noted as part of this evaluation. No specific FDA follow-up activities are planned at this time.

5. Corrective actions taken by state in response to FDA findings

No corrective actions are required to be taken by the state.

6. FDA recommendations

   No specific recommendations were provided as a result of this evaluation.

7. Formal Action Plans

   No formal corrective action plans have been requested.

8. State Program Accomplishments

   The highlight of the MDMR accomplishments for FY 2010 is the fact that they maintained effective patrol monitoring of the shellfish harvest areas only by the individual efforts of a very dedicated workforce. This accomplishment came at a great cost, both financial and the exhaustive effort of a very few. The Bureau is fearful that they will not be able to maintain this level of performance without filling existing vacancies in FY 2011. During the FY 2010 evaluation period the Bureau of Marine Patrol has faced several challenges related to the economic downturn:

   i. During the later part of FY 2010 the Bureau was placed under a new "curtailment order" from the Governor's Office to reduce spending by over 10%. The operational impact of that spending curtailment resulted in mileage restrictions for all personnel and a hold on all spending other than essential services and support.

   ii. Under attrition guidelines the Bureau had three unexpected vacancies created in their workforce in FY 2009 that were not filled due to budget shortfalls that failed to identify funding for those positions. These vacancies carried over from FY 2009 remain unfilled. In addition, two new vacancies have arisen in FY2010. Although two of the aforementioned vacancies are expected to be filled in the near future, new hires yet to be brought on board will need time to be trained before they come up to speed.

   The application of technology to field personnel has been a major accomplishment over the past several years. FY 2009 marked the final deployment of Mobile Data Terminals (MDT) that are now in service in every patrol vehicle and every major patrol vessel. The access to information and the ability to share that information with members of the industry has been very effective in public outreach and patrol monitoring efforts.

   During FY 2009 Marine Patrol began an evaluation project with DeLorme Mapping Company on an "Enterprise" solution to merge MDMR's Licensing and Enforcement data base (MRLEN) with the data files created by the Water Quality Division. The merge of the geo-mapping solution with current shellfish closures, licensing information and enforcement records will be a major leap forward in the leveraging of technology to assist patrol efforts in FY 2011 if this project is implemented. Unfortunately, due to budget restraints, this project was put on hold in FY2010 pending future funding.

9. New or Emerging Problem

No new or emerging problems were identified during this evaluation.

10. Technical Assistance and/or Training Requested by the State

    No technical assistance was requested by the state during the 2010 evaluation.

11. Summary of the State's Response to the FDA Evaluation

    The Bureau of Marine Patrol is in agreement and appreciative of the FY 2010 PEER completed by Donald Ullstrom, Regional Shellfish Specialist.

12. Conclusions

    The BMP Shellfish Patrol Program currently meets or exceeds all of the minimum requirements of the NSSP Model Ordinance. The central office in Hallowell maintains the risk assessment database and coordinates the states patrol effort to ensure strict compliance.

    The BMP continues to find new and innovative ways to utilize technology to aid in deterring illegal harvesting. Computers have now been installed in officers' vehicles which allow them access to helpful and sometimes critical information while performing their shellfish patrol duties.

    Although the bureau is eight officers below full staffing the remaining officers have been able to temporarily meet the needs of the public by patrolling areas more frequently based on need and by interacting and educating the public more with regards to human pollution and biotoxin and the health affects of eating contaminated shellfish.

Attachment I

With use of Aircraft at least six (6) times per month. **UPDATED 8/2009** Productivity Ease of Harvest Difficulty of Patrol

Closed Area Number	Location	Call #	Acres	Score	Wt	Rating	Score	Wt	Rating	Score	Wt	Rating	Sub-total	Adjust	Total	Risk Category	Number of Patrols
1	Piscataqua River, Kittery, Eliot	1823	1272	5	0.4	2.00	5	0.4	2.00	1	0.2	0.20	4.20	-0.65	3.55	Med	8
2-A	Portsmouth Harbor and vicinity	1823	219	5	0.4	2.00	5	0.4	2.00	1	0.2	0.20	4.20	-0.65	3.55	Med	8
3	Sisters Pt (Kittery)-East Pt (York)	1824	1207	5	0.4	2.00	5	0.4	2.00	1	0.2	0.20	4.20	-0.65	3.55	Med	8
4	East Pt. to Bald Head Cliff (York)	1824		5	0.4	2.00	5	0.4	2.00	1	0.2	0.20	4.20	-0.65	3.55	Med	8
5	Bald Head Cliff (York) to Israels Head (Ogunquit)	1824		5	0.4	2.00	5	0.4	2.00	1	0.2	0.20	4.20	-0.65	3.55	Med	8
6	Ogunquit River to Webhannet River	1824	1833	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
7	Little River to Cape Arundel	1824/1825	1141	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
8	Cape Arundel to Cape Porpoise	1825/1826	1347	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
9	Sampson Cove to Fortunes Rocks		283	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
10	Saco River and Saco Bay	1826/1827	3559	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
11	Scarborough River	1827	173	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
12	Spurwink River, Prout's Neck, Cape Elizabeth	1827/32/33	878	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
13-A	Portland Area (Cape Elizabeth to Falmouth)	1832/1833	1415 1	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
13-B	Western Casco Bay (Long Is. to Chebeague Is.)	1832/1833	982	3	0.4	1.20	4	0.4	1.60	4	0.2	0.80	3.60	-0.40	3.20	Med	8
14	Royal & Cousins R. and vicinity (Cmbrlnd to Frpt)	1832/33/35	91	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
15	Harraseeket & Litter Rivers (Freeport)	1835	143	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
16	Maquoit & Middle Bay (Frpt, Brunswick, Harpswell)	1835	132	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
17-A	Upper Harpswell Neck and Long Reach	1835/1836	48	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.65	3.15	Med	8
17-B	Harpswell Neck, Harpswell	1835	1262	3	0.4	1.20	5	0.4	2.00	4	0.2	0.80	4.00	-0.50	3.50	Med	8
17-C	Bailey Is., Orrs Is., & SW Sebascodegan Is.	1836	2149	4	0.4	1.60	5	0.4	2.00	3	0.2	0.60	4.20	-0.50	3.70	Med	8
18	Quahog Bay, Hen Cove, Ridley Cove (Harpswell)	1836	356	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
19-A	Upper New Meadows River (Bath/Harpswell)	1836/1837	58	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
19-B	Middle New Meadows R. (W Bath/Harpswell/ Phipps)	1836/1837	1411	3	0.4	1.20	1	0.4	0.40	2	0.2	0.40	2.00	-0.50	1.50	Low	4
19-C	Lower New Meadows River (Harpswell/Phippsburg)	1836/1837	853	3	0.4	1.20	4	0.4	1.60	2	0.2	0.40	3.20	-0.65	2.55	Low	4
20	Kennebec River and Tributaries	1837/1843	1489	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
21-A	Upper Sheepscot R. and Tribs (Wisc. Alna, New Cast.)			3	0.4	1.20	5	0.4	2.00	5	0.2	1.00	4.20	-0.65	3.55	Med	8
21-B	Sheepscot River (Wisc., Westport Is., Edgecomb)			3	0.4	1.20	5	0.4	2.00	5	0.2	1.00	4.20	-0.65	3.55	Med	8
21-C	Back R. and Montsweag Bay (Woolw., Wisc., Wstpt Is.)			3	0.4	1.20	5	0.4	2.00	5	0.2	1.00	4.20	-0.65	3.55	Med	8
21-D	Sheepscot R. (Wstpt Is., Edgecomb, Boothbay Harbor)			5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
21-E	Hockomock Bay to Robinhood Cove (Woolw./ Gtown)			3	0.4	1.20	5	0.4	2.00	5	0.2	1.00	4.20	-0.65	3.55	Med	8
21-F	Lower Sheepscot R & Bay (Gtown and Southport)			3	0.4	1.20	5	0.4	2.00	5	0.2	1.00	4.20	-0.65	3.55	Med	8

With use of Aircraft at least six (6) times per month. **UPDATED 8/2009** Productivity Ease of Harvest Difficulty of Patrol

Closed Area Number	Location	Call #	Acres	Score	Wt	Rating	Score	Wt	Rating	Score	Wt	Rating	Sub-total	Adjust	Total	Risk Category	Number of Patrols
22	Boothbay and vicinity (Southport, Boothbay & Harbor)		9060	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
23-A	Upper Damariscotta R. (Newcastle, Nobleboro, Damaris.)		685	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
23-C	Lower Damariscotta River (Boothbay, South Bristol)		550	3	0.4	1.20	3	0.4	1.20	2	0.2	0.40	2.80	-0.50	2.30	Low	4
24-A	John's River & Pemaquid River (South Bristol/Bristol)		325	5	0.4	2.00	3	0.4	1.20	3	0.2	0.60	3.80	-0.50	3.30	Med	8
24-B	John's Bay (South Bristol/Bristol)			3	0.4	1.20	3	0.4	1.20	2	0.2	0.40	2.80	-0.50	2.30	Low	4
25-C	Western Muscongus Bay (Bristol & Bremen)	1845	425	5	0.4	2.00	3	0.4	1.20	3	0.2	0.60	3.80	-0.40	3.40	Med	8
26	Medomak River, Waldoboro, Bremen, Friendship	1845/1847	870	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.65	3.15	Med	8
26-A	Monhegan Island	1847	522	0	0.4	0.00	1	0.4	0.40	3	0.2	0.60	1.00	0.00	1.00	**	******
26-B	Martin Point, Friendship to Gay Island, Cushing	1847	144	1	0.4	0.40	5	0.4	2.00	3	0.2	0.60	3.00	-0.65	2.35	Low	4
27	Upper St. George River and tribs (Warren-St. George)	1847/1853	1586	1	0.4	0.40	5	0.4	2.00	3	0.2	0.60	3.00	-0.65	2.35	Low	4
27-A	Eastern Wheeler Bay, St. George	1854	18	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.50	3.10	Med	8
27-B	Lower St. George River (Cushing and St. George)	1847/1853	282	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
28	Marshall Pt to Clark Cove, St. George	1853	194	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.50	3.30	Med	8
28-A	Port Clyde and the St. George Islands	1847/1853	390	0	0.4	0.00	5	0.4	2.00	3	0.2	0.60	2.60	-0.40	2.20	Low	4
28-B	Patten Pt., St. George to Thorndike Point, S. Thomaston	1854	404	1	0.4	0.40	5	0.4	2.00	2	0.2	0.40	2.80	-0.40	2.40	Low	4
28-C	No. end of Rackliff Is., St George	1854	65	0	0.4	0.00	5	0.4	2.00	3	0.2	0.60	2.60	-0.50	2.10	**	******
28-E	Ash Point to Birch Point, Owl's Head	1854	60	3	0.4	1.20	5	0.4	2.00	1	0.2	0.20	3.40	-0.40	3.00	Med	8
28-I	Weskeag River, So Thomaston, Owls Head	1854	10	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.40	4.00	High	16
29	Rockland (Rockland Harbor, Broad & Deep Coves)	1854/1857	2460	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
29-A	Owl's Head	1854	727	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.40	4.20	High	16
29-B	Matinicus Island	1854	2203	5	0.4	2.00	3	0.4	1.20	4	0.2	0.80	4.00	-0.40	3.60	Med	8
30	Rockport Area	1857	2036	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
30-D	Vinalhaven and Vicinity	1856	1255	5	0.4	2.00	3	0.4	1.20	4	0.2	0.80	4.00	-0.40	3.60	Med	8
30-I	North Haven Island	1855	3895	5	0.4	2.00	3	0.4	1.20	4	0.2	0.80	4.00	-0.40	3.60	Med	8
31-A	Rockport Harbor to Ducktrap Harbor, Lincolnville	1857	2140	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
31-B	Spruce Head to Kelleys Cove, Northport	1857	1237	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
32	Belfast Bay	1857	4172	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
33	Searsport	1863	2833	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
34	Stockton Harbor, Stockton Springs & Searsport	1863	73	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.50	3.10	Med	8
35	Penobscot River (Stockton Sp., Bucksport, Orland)	1863	1274 3	3	0.4	1.20	5	0.4	2.00	4	0.2	0.80	4.00	-0.65	3.35	Med	8
36	Bagaduce River and Harborside (Brooksville, Castine)	1863	207	1	0.4	0.40	5	0.4	2.00	2	0.2	0.40	2.80	-0.40	2.40	Low	4

With use of Aircraft at least six (6) times per month.

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Closed Area Number	Location	Call #	Acres	Productivity Score	Wt	Rating	Ease of Harvest Score	Wt	Rating	Difficulty of Patrol Score	Wt	Rating	Sub-total	Adjust	Total	Risk Category	Number of Patrols
36-A	Northern Bay, Toen of Penobscot	1863	588	1	0.4	0.40	5	0.4	2.00	2	0.2	0.40	2.80	-0.40	2.40	Low	4
36-B	Upper Bagaduce River, Town of Brooksville	1863	7	1	0.4	0.40	5	0.4	2.00	2	0.2	0.40	2.80	-0.40	2.40	Low	4
36-F	Islesboro	1857	1760	1	0.4	0.40	5	0.4	2.00	3	0.2	0.60	3.00	-0.65	2.35	Low	4
37	Condon Pt. to Herricks Village, Brooksville	1863	547	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
38	Deer Isle, Stonington & Merchants Row	1864	222	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.50	3.10	Med	8
39	Blue Hill Harbor, McHeard & Curtis Coves, Salt Pond	1863	309	5	0.4	2.00	5	0.4	2.00	5	0.2	1.00	5.00	-0.50	4.50	High	16
39-A	Benjamin R., Center Harbor, Naskeag Pt. Herrick Bay	1863	32	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.40	3.40	Med	8
40	No. Morgan Bay, Union R. & Patten Bays, Heath Bk.	1862/1863	1828	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
42	Bass Harbor & eastern shore of Duck Cove, Tremont	1862	702	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
42-B	Swans Island, and surrounding Islands	1866	65	3	0.4	1.20	4	0.4	1.60	3	0.2	0.60	3.40	-0.65	2.75	Low	4
44	Southwest Hbr, Somes Sd. NE Hbr & Cranberry Isles	1862/1866		3	0.4	1.20	4	0.4	1.60	3	0.2	0.60	3.40	-0.40	3.00	Med	8
47	Bar Harbor to Hulls Cv, Salisbury Cv, Thomas Bay	1866	1987	3	0.4	1.20	4	0.4	1.60	2	0.2	0.40	3.20	-0.65	2.55	Low	4
49-A	Jellison Cove, Hancock	1866	9	0	0.4	0.00	5	0.4	2.00	1	0.2	0.20	2.20	-0.40	1.80	**	******
49-B	Skillings River, Lamoine-Hancock	1866	25	1	0.4	0.40	5	0.4	2.00	2	0.2	0.40	2.80	-0.40	2.40	Low	4
50	Sorrento	1872	49	3	0.4	1.20	5	0.4	2.00	1	0.2	0.20	3.40	-0.65	2.75	Low	4
50-A	Rt 1 Bridge, W. Sullivan & Long Cove, Sullivan	1872	30	3	0.4	1.20	5	0.4	2.00	1	0.2	0.20	3.40	-0.50	2.90	Low	4
50-B	Springer, Mill & West Brooks, West Franklin	1872	93	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.40	3.40	Med	8
50-C	Johnny's Brook, Card Mill Stream, Franklin	1872	2	1	0.4	0.40	5	0.4	2.00	1	0.2	0.20	2.60	-0.40	2.20	Low	4
50-D	Evergreen Point, Sullivan	1872		2	0.4	0.80	5	0.4	2.00	2	0.2	0.40	3.20	-0.40	2.80	Low	4
50-E	Egypt Bay, Hancock and Franklin	1866/1872	106	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.40	3.40	Med	8
51	Winter Harbor & Grindstone Neck (Winter Harbor)	1872	292	1	0.4	0.40	5	0.4	2.00	3	0.2	0.60	3.00	-0.40	2.60	Low	4
51-C	Bunker Cove, South Gouldsboro	1872	12	1	0.4	0.40	5	0.4	2.00	1	0.2	0.20	2.60	-0.65	1.95	Low	4
52	Schoodic Point to Corea, Winter Harbor-Couldsboro	1872	42	3	0.4	1.20	5	0.4	2.00	3	0.2	0.60	3.80	-0.65	3.15	Med	8
52-E	Dyer Bay, Dyer Harbor, Pinkham Bay, Steuben	1874	73	3	0.4	1.20	5	0.4	2.00	1	0.2	0.20	3.40	-0.65	2.75	Low	4
52-G	Joy Bay (Gouldsboro/Steuben)	1874	162	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
53	Narraguagus River and vicinity to Harrington River	1874/1875	821	5	0.4	2.00	5	0.4	2.00	3	0.2	0.60	4.60	-0.65	3.95	Med	8
53-A	Pleasant River, So end of Dyer Cv & Batson Brook	1875	489	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
53-H	Cape Split & Mash Harbor, Addison	1875	84	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.50	3.10	Med	8
54	Moosabec Reach, No. end of Beals Is., Alley Bay	1875	595	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
54-B	Indian & West Rivers (Addison-Jonesport)	1875	68	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
54-D	West Branch of Little Kennebec Bay (Machias)	1876	68	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8

With use of Aircraft at least six (6) times per month.

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				Productivity			Ease of Harvest			Difficulty of Patrol							
Closed Area Number	Location	Call #	Acres	Score	Wt	Rating	Score	Wt	Rating	Score	Wt	Rating	Sub-total	Adjust	Total	Risk Category	Number of Patrols
54-H	Chandler River, Jonesboro	1875	180	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.50	3.90	Med	8
55	Machias & E. Machias Rivers and Machias Bay	1876	2088	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
55-A	Money & Bog Bk Coves, Lil Machias B., Haycock Hbr	1877	161	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.65	2.95	Low	4
56	Northwestern Cobscook Bay (Edmunds, Pembroke)	1877	88	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.65	2.95	Low	4
57	Whiting Bay (Edmunds Twp, Trescott Twp)	1877	15	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.65	3.75	Med	8
58	Lubec	1877	487	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.40	4.00	High	16
59	Outer Cobscook Bay (Eastport and Perry)	1877	653	3	0.4	1.20	5	0.4	2.00	2	0.2	0.40	3.60	-0.40	3.20	Med	8
62	St. Croix Rvr, Calais & Robbinston, Loring, Mill, Frost Cvs	1877	7933	5	0.4	2.00	5	0.4	2.00	2	0.2	0.40	4.40	-0.40	4.00	High	16

FY 2010
PROGRAM ELEMENT EVALUATION REPORT

OF THE

CONTROL OF HARVEST ELEMENT
BUREAU OF MARINE PATROL
DEPARTMENT OF MARINE RESOURCES
STATE OF MAINE

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ON

August 12, 2010